

Draft Permit and Fact Sheet

Permit Application 1006884

Division of Mined Land Reclamation

30 April 2014

The Draft Permit and Fact Sheet for Application 1006884. The draft permit document begins on page two of this document. The associated fact sheet document follows and is headed by the title 'VIRGINIA DIVISION OF MINED LAND RECLAMATION Joint CSMO/NPDES Permit Factsheet'. This document will be published for a thirty day period as specified by the watermark.



COMMONWEALTH OF VIRGINIA
Department of Mines, Minerals and Energy
Division of Mined Land Reclamation

NPDES Permit Number: 0081760
Associated CSMO Permit Number: 1101760
Permit Application Number: 1901884

Permit Original Issue Date: 10/20/2000
Application Approval Date: **Pending**
Expiration Date: 10/20/2015

**AUTHORIZATION TO DISCHARGE UNDER THE
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM
AND
THE VIRGINIA STATE WATER CONTROL LAW**

Pursuant to Authority under Section 42.1 -254 of the Code of Virginia, as amended, and the Virginia Pollutant Discharge Elimination System (VPDES) Regulation, Part X - Delegation of Authority to the Department of Mines, Minerals and Energy for Coal Surface Mining Operations (9VAC25-31-940), the following owner is authorized to discharge from the facility listed below in compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto and in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in Sections A, B, C, and D of this permit and the plans and requirements found in joint CSMO/NPDES permit number 1101760/0081760 and any and all subsequent approved permitting actions. For the purpose of this permit, NPDES and VPDES permits are synonymous.

Owner: RED RIVER COAL COMPANY, INC.
Facility Name: BACKBONE RIDGE SURFACE MINE
County: WISE
Facility Location: 6 MILES NE OF NORTON ON ROGERS & AMOS RIDGE

The owner is authorized to discharge to the following receiving streams:

Stream Name	Stream Basin	Stream Subbasin	Stream Tier
CANEPATCH CREEK	TENNESSEE	POWELL - ROARING FORK	Tier I
ROARING FORK	TENNESSEE	POWELL - ROARING FORK	Tier I
POUND FORK	TENNESSEE	POWELL - ROARING FORK	Tier I
BUCKEYE BRANCH	TENNESSEE	POWELL-POWELL RIVER DORCHESTER	Tier I
POWELL RIVER	TENNESSEE	POWELL RIVER	Tier I

Director, Division of Mined Land Reclamation

Date

DRAFT PUBLISHED 2014-04-29 EXPIRES 2014-05-29

Permit Contents

The complete joint CSMO/NPDES permit consists of the following:

- I. The approved CSMO/NPDES Permit Application, and any and all subsequent approved permit revisions, renewals, midterms, anniversary reports, completion reports, and DMLR administrative actions.
- II. The CSMO/NPDES Permit Document, including
Permit Signature Page
Section A – Effluent Limitations and Monitoring Requirements
Section B – Schedule of Compliance (if applicable)
Section C – Standard Terms and Conditions
Section D – Other Requirements
- III. The CSMO/NPDES Factsheet Document

Facility Information

Permittee Name: RED RIVER COAL COMPANY, INC.
Address: P. O. BOX 668
City: NORTON State: VA Zip: 24275
Facility: BACKBONE RIDGE SURFACE MINE
Total permit acres: 2324.63, (W85E)

Application Information:

Application Type: RENEWAL C/N

Application Description: CSMO/NPDES Permit Renewal (TEP)

NPDES Outfall Description:

NPDES outfalls associated with this permit result from the control of surface water runoff resulting from precipitation and/or groundwater discharges from coal mining activities associated with mining. Treatment facilities may include sedimentation structures, chemical treatment such as the addition of neutralizing agents or flocculants, or no treatment (in the case of direct discharge of underground mine drainage when treatment is not required to meet applicable effluent limitations). The following details describe the treatment facility or source (reference the Facility Location field) associated with each approved outfall. Specific information regarding each outfall and facility is found in Section V and Section XII of the CSMO/NPDES permit.

Section A
Permit Requirements

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

<i>Outfall</i>	<i>Chron WET Monthly Avg</i>	<i>Chron WET AEL</i>	<i>Chron WET Sample Interval</i>	<i>Chron WET Sample Rate</i>
027-27	NA	NA	Quarter	1
029-29	NA	NA	Quarter	1
031A-31A	NA	NA	Quarter	1
032-032	NA	NA	Quarter	1
009-9	NA	NA	Quarter	1
010-10	NL TUc	NA	Quarter	1
011-11	NA	NA	Quarter	1
012-12	NL TUc	NA	Quarter	1
002-2	NA	NA	Quarter	1
001A-T-1A-T	NA	NA	Quarter	1
019-19	NA	NA	Quarter	1
020-20	NA	NA	Quarter	1
025-25	NA	NA	Quarter	1
030A-30A	NA	NA	Quarter	1
031-31	NA	NA	Quarter	1
028-28	NA	NA	Quarter	1
001A-1A	NA	NA	Quarter	1
001B-1B	NA	NA	Quarter	1
021B-21B	NA	NA	Quarter	1
022-22	NA	NA	Quarter	1
023-23	NA	NA	Quarter	1
026-26	NA	NA	Quarter	1

<i>Outfall</i>	<i>Selenium Monthly Avg</i>	<i>Selenium Max</i>	<i>Selenium AEL</i>	<i>Acute WET Monthly Avg</i>	<i>Acute WET AEL</i>	<i>Acute WET Sample Interval</i>	<i>Acute WET Sample Rate</i>
027-27	NA	NA	NA	NA	NA	Quarter	1
029-29	NA	NA	NA	NA	NA	Quarter	1
031A-31A	NA	NA	NA	NA	NA	Quarter	1
032-032	NA	NA	NA	NA	NA	Quarter	1
009-9	NA	NA	NA	NA	NA	Quarter	1
010-10	5.00 ug/L	20.00 ug/L	NA	NL T ₁₀	NA	Quarter	1
011-11	NA	NA	NA	NA	NA	Quarter	1
012-12	5.00 ug/L	20.00 ug/L	NA	NL T ₁₀	NA	Quarter	1
002-2	NA	NA	NA	NA	NA	Quarter	1
001A-T-1A-T	NA	NA	NA	NA	NA	Quarter	1
019-19	NA	NA	NA	NA	NA	Quarter	1
020-20	NA	NA	NA	NA	NA	Quarter	1
025-25	NA	NA	NA	NA	NA	Quarter	1
030A-30A	NA	NA	NA	NA	NA	Quarter	1
031-31	NA	NA	NA	NA	NA	Quarter	1
028-28	NA	NA	NA	NA	NA	Quarter	1
001A-1A	NA	NA	NA	NA	NA	Quarter	1
001B-1B	NA	NA	NA	NA	NA	Quarter	1
021B-21B	NA	NA	NA	NA	NA	Quarter	1
022-22	NA	NA	NA	NA	NA	Quarter	1
023-23	NA	NA	NA	NA	NA	Quarter	1
026-26	NA	NA	NA	NA	NA	Quarter	1

<i>Outfall</i>	<i>TDS Monthly Avg</i>	<i>TDS Max</i>	<i>TDS AEL</i>	<i>Iron Monthly Avg</i>	<i>Iron Max</i>	<i>Iron AEL</i>	<i>Manganese Monthly Avg</i>	<i>Manganese Max</i>	<i>Manganese AEL</i>
027-27	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
029-29	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
031A-31A	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
032-032	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
009-9	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
010-10	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
011-11	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
012-12	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
002-2	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
001A-T-1A-T	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
019-19	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
020-20	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
025-25	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
030A-30A	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
031-31	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
028-28	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
001A-1A	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
001B-1B	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
021B-21B	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
022-22	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
023-23	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In
026-26	NL mg/L	NL mg/L	NA	3.0 mg/L	6.0 mg/L	0.2 In	2.0 mg/L	4.0 mg/L	0.2 In

<i>Outfall</i>	<i>Flow</i> <i>Monthly Avg</i>	<i>pH</i> <i>Monthly Avg</i>	<i>pH</i> <i>Min</i>	<i>pH</i> <i>Max</i>	<i>pH</i> <i>AEL</i>	<i>TSS</i> <i>Monthly Avg</i>	<i>TSS</i> <i>Max</i>	<i>TSS</i> <i>AEL</i>
027-27	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
029-29	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
031A-31A	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
032-032	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
009-9	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
010-10	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
011-11	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
012-12	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
002-2	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
001A-T-1A-T	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
019-19	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
020-20	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
025-25	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
030A-30A	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
031-31	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
028-28	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
001A-1A	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
001B-1B	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
021B-21B	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
022-22	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
023-23	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In
026-26	NL GPM	NL Std	6.0 Std	9.0 Std	NA	35.00 mg/L	70.00 mg/L	0.2 In

The following guidance and definitions apply to all approved effluent limitations, unless specifically overridden in the tables above.

A) The collection method is to be a grab sample for all measurements except for flow, which is to be an estimation.

B) The sampling frequency for all measurements except WET measurements is to be two samples collected per calendar month, collected at least seven days apart. The sampling frequency for WET measurements is to be once per calendar quarter.

C) Monthly Avg is to be the arithmetic mean of all samples collected in a calendar month. Max is to be a daily maximum and min is to be daily minimum for all measured parameters except for pH, which is to be measured as an instantaneous maximum and instantaneous minimum. All limits are followed by the units in which they are to be measured.

D) NL indicates monitoring is required with no limitations (No Limit). NA indicates the parameter does not apply to the particular outfall (Not Applicable).

E) The AEL (Alternate Effluent Limit) is the minimum rainfall event necessary for alternate effluent limitations to apply to the specified parameter for the given outfall. TSS is to be collected and reported at all times, even when the AEL is utilized.

F) RMR stands for Representative Monitoring Required. RWETMR stands for Representative Whole Effluent Toxicity Monitoring Required.

B. OTHER REQUIREMENTS

The term Department refers to the Virginia Department of Mines, Minerals, and Energy

1. This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard, limitation or prohibition for a pollutant which is promulgated or approved under Section 307(a)(2) of the Clean Water Act, if the effluent standard, limitation, or prohibition so promulgated or approved:
 - a. Is more stringent than any effluent limitation on the pollutant already in the permit; or
 - b. Controls any pollutant not limited in the permit.
2. This permit shall be modified or alternatively revoked and reissued if any approved waste load allocation procedure, pursuant to Section 304(d) of the Clean Water Act, imposes waste load allocations, limits or conditions on the facility that are not consistent with the permit requirements.
3. This permit may be modified or alternatively revoked and reissued to incorporate appropriate limits in the event effluent monitoring indicates the need for any water quality-based limits.
4. The permittee shall notify the Department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter;
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
 - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) Five hundred micrograms per liter;
 - (2) One milligram per liter for antimony;
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
5. Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.
6. The permittee shall monitor the effluent that is representative of outfall(s) 010, 012 for the substances noted in Part II, Section A.E.2, Table 1 according to the indicated analysis

number, quantification level, sample type and frequency. The outfalls listed above may be representative of a group of substantially similar outfalls on this mining operation.

For new and proposed mining operations, the monitoring shall begin within six months of completion of construction of the first sedimentation basin serving any of each of these groups of substantially similar outfall locations, or as soon as a measurable discharge occurs. If the representative outfall is not constructed first or is not the first outfall of the group represented to discharge active mine drainage [Part II Section C (NRDES Definitions, (B))], the first discharging outfall within a substantially similar group should be utilized. The sampled outfall will then serve as the representative outfall for this group unless otherwise determined by the Division. The permittee should send notification to the Division prior to sampling if the designated representative outfall is not utilized.

Sampling and analysis of the representative outfalls is also required at permit renewal.

The data shall be submitted with the discharge monitoring report for the final month of the calendar quarter in which the sampled discharge occurred. The data shall also be submitted with the materials required for permit reissuance.

Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The Department will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Part II, Section A.E.2, Table 1.

7. The permittee shall comply with the following reporting requirements for all Section A monitoring:

- a. The quantification levels (QL) shall be less than or equal to the following concentrations:

<u>Effluent Parameter</u>	<u>Quantification Level</u>
TSS	1.0 mg/l
TDS	1.0 mg/l
Iron	1.0 mg/l
Manganese	1.0 mg/l
Selenium	2.5 µg/l

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance and quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained with the required precision. The permittee shall use any method in accordance with Part II Section C of this permit. The permittee shall use a VELAP certified analytical laboratory for all submitted analyses.

- b. **Monthly Average** -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part II Section A of this permit condition shall be determined as follows: All concentration data below the QL given in Part II Section B.7.a will be treated as zero. All concentration data equal to or above the QL used for the analysis should be treated as reported. An arithmetic average is to be calculated using all reported data for the month, including the defined zeros. This arithmetic average must be reported on the Discharge Monitoring Report (DMR). If all measured values are below the QL used for the analysis, then the arithmetic average is to be defaulted to $\frac{1}{2}$ of the QL. If a quantified report is required on the DMR and the reported monthly average concentration is less than the QL, the monthly average is to be recorded as $\frac{1}{2}$ of the QL value. If a quantified report is required on the DMR and the reported monthly average is greater than the QL, the actual reported data including defined zeroes is to be used along with flow data for each sample day to determine the daily averages. The monthly average is then to be reported as the arithmetic mean of the daily averages.

Daily Maximum -- Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part II Section A of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as reported. An arithmetic mean shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis (QL must be less than or equal to the QL listed in Part II Section B.7.a), the maximum value of the daily averages shall be reported numerically as $\frac{1}{2}$ of the QL. If a quantified measurement is required on the DMR and the reported daily maximum is less than the QL, the daily maximum for the measured parameter is to be reported as $\frac{1}{2}$ of the given QL. In all other cases, the reported daily average concentrations (including the defined zeros) and corresponding daily flows are to be used in daily mean calculations.

Single Datum - Any single datum required shall be reported numerically as $\frac{1}{2}$ of the QL if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in Part II Section A.B.7.a. above). Otherwise the numerical value shall be reported.

- c. **Significant Digits** -- The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

C. WHOLE EFFLUENT TOXICITY TESTING:

1. Acute Monitoring: Outfall(s) None

- a. The permittee shall monitor effluent that is representative of Outfall(s) None within 6 months of approval of this NPDES permit for acute toxicity tests until there are a minimum of 4 for each test required. The permittee shall perform these tests quarterly.

For new and proposed mining operations, the monitoring shall begin within six months of completion of construction of the first sedimentation basin serving any of each of these groups of substantially similar outfall locations, or as soon as a measurable discharge occurs. If the representative outfall is not constructed first or is not the first outfall of the group represented to discharge active mine drainage [Part II Section C NPDES Definitions, (B)], the first discharging outfall within a substantially similar group should be utilized. The sampled outfall will then serve as the representative outfall for this group unless otherwise determined by the Division. The permittee should send notification to the Division prior to sampling if the designated representative outfall is not utilized.

The acute tests to use are:

- 48 Hour Static Acute test with *Ceriodaphnia dubia* (EPA Method 2002)
- 48 Hour Static Acute test with *Pimephales promelas* (EPA Method 2000)

These acute tests are to be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The NOAEC (No Observed Adverse Effect Concentration), as determined by hypothesis testing, shall be reported on the DMR. The LC₅₀ should also be determined and noted on the submitted report. Tests in which control survival is less than 90% are not acceptable.

- b. The test dilutions should be able to determine compliance with the following endpoint:

$$\text{NOAEC} = 100\%$$

- c. The permittee shall submit the following information with the results of the toxicity tests:
- (1) An estimate of the total volume discharged and the duration of the discharge.
 - (2) The time at which the discharge was initiated.
 - (3) The time at which sampling was initiated.
- d. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
- e. The assembled data will be evaluated for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if such evaluation is requested by

the permittee or if toxicity has been demonstrated over the course of sampling. Should evaluation of the data indicate that a limit is needed, WET limits and associated compliance schedules will be imposed and the permittee may cease the toxicity tests outlined in Part II Section C.1.a.

- f. If evaluation of the assembled data results in the conclusion that no limit is needed, the permittee shall perform an acute WET test for each species of each representative outfall at permit renewal as defined on the reporting schedule contained in Part II Section C.3. All applicable data will be reevaluated for reasonable potential at the end of the permit term.
- g. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

2. Acute and Chronic Monitoring: Outfalls 010, 012

- a. The permittee shall monitor effluent that is representative of Outfalls 010, 012 within 6 months of approval of this NPDES permit for acute and chronic toxicity tests until there are a minimum of 4 for each test required. The permittee shall perform these tests quarterly.

For new and proposed mining operations, the monitoring shall begin within six months of completion of construction of the first sedimentation basin serving any of each of these groups of substantially similar outfall locations, or as soon as a measurable discharge occurs. If the representative outfall is not constructed first or is not the first outfall of the group represented to discharge active mine drainage [Part II Section C NPDES Definitions, (B)], the first discharging outfall within a substantially similar group should be utilized. The sampled outfall will then serve as the representative outfall for this group unless otherwise determined by the Division. The permittee should send notification to the Division prior to sampling if the designated representative outfall is not utilized.

The acute tests to use are:

- 48 Hour Static Acute test with *Ceriodaphnia dubia* (EPA Method 2002)
- 48 Hour Static Acute test with *Pimephales promelas* (EPA Method 2000)

These acute tests are to be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The NOAEC (No Observed Adverse Effect Concentration), as determined by hypothesis testing, shall be reported on the DMR. The LC₅₀ should also be determined and noted on the submitted report. Tests in which control survival is less than 90% are not acceptable. The chronic tests to use are:

Chronic 3-Brood Survival and Reproduction Static Renewal Test with *Ceriodaphnia dubia* (EPA Method 1002)

Chronic 7-Day Survival and Growth Static Renewal Test with *Pimephales promelas* (EPA Method 1000)

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. A retest of a non-acceptable test must be performed within 30 days of the test it is replacing. Express the test NOEC as TUC (Chronic Toxic Units), by dividing 100/NOEC for DMR reporting. Report the LC50 at 48 hours and the IC25 with the NOEC's in the test report.

- b. The test dilutions should be able to determine compliance with the following endpoint:

Acute NOAEC = 100%
Chronic NOEC of 69% equivalent to a TUC of 1.44

- c. The permittee shall submit the following information with the results of the toxicity tests:
- (1). Estimate of the total volume discharged and the duration of the discharge.
 - (2). Time at which the discharge was initiated.
 - (3). Time at which sampling was initiated.
- d. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
- e. The test data will be evaluated statistically for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests of Part II Section C.2.a may be discontinued.
- f. If after evaluating the data, it is determined that no limit is needed, the permittee shall continue acute and chronic toxicity testing (both species) of each representative outfall at renewal, as on the reporting schedule contained in Part II Section C.3. All applicable data will be reevaluated for reasonable potential at the end of the permit term.
- g. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.

3. Reporting Schedule:

The permittee shall report the results of the toxicity tests on the appropriate DMR or other methods prescribed by the Department and supply one copy of the toxicity test reports specified in this Whole Effluent Toxicity Program. This data is to be provided within 30 days following the end of the calendar quarter in which the analysis was completed.

D. EVALUATION OF TMDL COMPLIANCE:

The Department will calculate mining waste load quarterly for each TMDL watershed.

Permittee will ensure that waste loads discharged from permit do not exceed mining waste load allocations set forth in the applicable TMDL for the watershed or any individual waste load allocation determined applicable by the Department for this permit and included herein.

Waste load for permit will be calculated from reported monitoring data according to the following formula for each monitoring record:

$$\text{Number of Days represented by sample} \times \text{Flow (gpm)} \times \text{Concentration (mg/L)} \times \text{Conversion Factor (0.00545)} = \text{Kg loading of pollutant}$$

The annual loading for the individual permit will be the summation of all calculated loadings from reported monitoring records associated with the permit for the previous four quarters of data.

For permits within the TMDL watershed that must adhere to aggregate mining waste loads, the waste load from the permit will be summed with mining waste loads from other permitted coal mining discharges within the TMDL watershed and the aggregate mining waste load will be compared to the mining waste load allocation of the approved TMDL report.

If the aggregated annual mining waste load exceeds the mining waste load allocation presented in the TMDL, then the permittee will adhere to the Department's mining waste load reduction actions for TMDL watersheds and any applicable offset.

Applicable Mining Waste Load Offsets

The Department will track approved offset balances for this permit utilizing the Department's TMDL Reporting System. If the permit is required to have a mining waste load offset in order to discharge, then the following requirements will also be applied.

1. Permit compliance will be determined by comparing the rolling annualized aggregate mining waste load to the offset limitations. The permit will not be allowed to exceed the mining waste load offset amount credited to this permit except as described below:
 - a. Provided excess mining waste load is available when the aggregate watershed mining waste load is compared to the TMDL mining waste load allocation, the excess may be applied to the permitted waste load for that particular quarter.
 - b. On the condition of the rolling annualized aggregate waste load exceeding the offset limitation, then the permittee may request that additional available offset credit be applied to the permit.
2. If no excess mining waste load is available and no existing offset credit is available, then the excess mining waste load amount from this permit must have an additional offset. The additional offset must be reviewed and approved by the Department.

There is no offset required for this permit.

TMDL Reopener Clause

This permit is subject to a TMDL Reopener Clause as described in Part II Section D TMDL Special Conditions (a).

E. STREAM MONITORING CONDITIONS:

1. To ensure protection of aquatic species and evaluate compliance with the narrative water quality standards, biological surveys are to be completed semi-annually to determine the benthic health of Canepatch Creek at location(s) Bcpt-1 and Powell River at location(s) Bpr-1 and Roaring Fork at location(s) Brfk-1, Brfk-2, Brfk-3, Brfk-4, C-R1A-C-P10 and as outlined in the joint CSMO/NPDES permit (Part I, Sections 8.3 and 21C). DEQ's Virginia Stream Condition Index (VASCI) will be utilized to determine a score for each monitoring location. The Department may also consider applicable VASCI scores generated by DEQ. The stream habitat scores and chemical data will also be collected at these locations. All biologic sampling shall be done in accordance with applicable protocols as described below. Biological survey results will need to be submitted 120 days following the date the survey was conducted.

The Department, in consultation with the applicant, will establish baseline VASCI scores for each monitoring location based on the results of biological monitoring required prior to initiation of the permitted activity. The applicant may utilize more than one same season survey collected at the designated BASs prior to the initiation of the permitted activity to establish baseline. If the aquatic ecosystem at the BASs listed above, prior to initiation of the permitted activity, is not impaired based on the VASCI score, and taking into account all potentially applicable criteria, then the acceptable future biological condition will be a VASCI score greater than or equal to 60. If the aquatic ecosystem at the assessment stations, prior to initiation of the permitted activity, is impaired based on VASCI scores, then the applicant will need to identify existing conditions within the watershed that may be contributing to the problem. A VASCI score greater than or equal to the baseline value would represent an acceptable future condition.

In determining whether a lower VASCI score represents an unacceptable condition, the DMLR will utilize best professional judgment, including a consideration of the inherent variability of the VASCI scores. In any case, the permittee is required to engage in adaptive management to improve the biological condition of the receiving streams if the VASCI falls below the established baseline conditions listed in the Biological Monitoring Report contained in Part I, Section 8.3 of the joint permit for two consecutive same season surveys. In order to prevent biological conditions at the BASs from reaching unacceptable biological condition, the following plan will be implemented as appropriate.

- Disturbing the smallest area at any one time during the mining operation through progressive backfilling, grading, and prompt revegetation.
- Stabilizing the backfill material to promote a reduction in the rate and volume of runoff.
- Diverting runoff away from disturbed areas.
- Directing water and runoff with protected channels.
- Using straw, mulches, vegetative filters, and other measures to reduce overland flow.
- Reclaiming all lands disturbed by mining as contemporaneously as practicable.
- Enhanced riparian plantings.
- Stream restoration/enhancement as appropriate. In-stream enhancement measures may be taken such as step pools, eddy rocks, and aquatic habitat structures, if appropriate for the applicable stream reach.
- Test overburden to determine the material that contains any constituents determined to be of concern from a receiving water quality perspective, so it can be isolated through material handling or other methods;

- Increase stream buffer zones;
- Minimize fill areas;
- Construct fills so as to minimize infiltration from precipitation events
- Conduct Toxicity Identification and/or Reduction Evaluation pursuant to EPA s102
- Segregate weathered rock and return to surface;
- Expedite reclamation;
- Use natural stream restoration techniques.
- Any other measures that are identified at the time of implementation.

The benthic surveys shall be conducted semi-annually each year in the spring and fall season periods determined by DEQ, avoiding to the maximum extent practicable times when the sample location is influenced by abnormal conditions, including drought and/or scouring flood. All biological surveys should be conducted as close to the anniversary date of the original surveys as possible. In addition, all biologic sampling shall be done in accordance with the Virginia Department of Game and Inland Fisheries scientific collection permit and DEQ's Virginia Stream Condition Index (VASCI) protocol. The DEQ has developed the following procedure.

- Conduct benthic sampling using Virginia benthic protocols including time of year restrictions for sample collection
- Collect organisms, laboratory subsample to 300 organisms in a gridded pan.
- Identify organisms to genus level, excluding chironomids (midges)
- Collapse data to family level
- Statistically reduce data to 100 organisms; computer subsampling programs available.
- Calculate the VASCI score
- Provide raw 300 count genus-level data in electronic spreadsheet format.

2. To ensure protection of sensitive species and to evaluate compliance with the numeric water quality standards, the permittee shall conduct chemical surface water monitoring at instream locations BCPT-1,BPR-1,BRFK-1,BRFK-2,BRFK-3,BRFK-4,C-P12,C-P10 as described in Section 8.3 of the joint CSMO/NPDES permit and shown on the applicable map (Attachment 21.2.E). This monitoring is to be conducted concurrent with the biological surveys required under item Part II Section A.E.1. Spring chemical monitoring will need to be submitted within 30 days after the end of the second quarter of the year the sample was collected. Fall chemical monitoring will need to be submitted within 30 days after the end of the fourth quarter of the year the sample was collected.

The permittee has the option of conducting metals analyses for total metals only even though instream water quality standards are based on dissolved metal concentrations. If total metal analyses concentrations exceed instream standards, the permittee may collect dissolved metal samples for those metals exceeding instream standards to confirm whether or not the instream standard has been met. Otherwise the total metals concentration will be used to determine compliance with the instream standard.

3. The data provided to satisfy Part II Section A, at a minimum, will be evaluated upon each major modification and permit renewal to determine whether permit modifications are necessary for compliance with the narrative and numeric water quality standards. Should any of the data indicate that the discharges from this operation have the potential to cause or contribute to a violation of either a numeric or narrative water quality standard, additional pollutant specific limits or whole effluent toxicity limits shall be imposed.

TABLE 1 - Parameters**Parameter**

Flow (gpm)
Temperature (°c)
pH (std units)
TSS (mg/L)
Specific Conductance (µS/cm)
TDS (mg/L)
Sulfates (mg/L)
Bromide (mg/L)
Chlorides (mg/L)
Aluminum (mg/L)
Iron (mg/L)
Manganese (mg/L)
Magnesium (mg/L)
Total Acidity (mg/L)
Total Alkalinity (mg/L CaCO₃)
Bicarbonate Alkalinity (mg/L)
Carbonate Alkalinity (mg/L)
Hardness (mg/L CaCO₃)
Total Zinc (µg /L)
Total Antimony (µg /L)
Total Arsenic (µg /L)
Total Beryllium (µg /L)
Total Cadmium (µg /L)
Total Chromium (µg /L)
Total Copper (µg /L)
Total Lead (µg /L)
Total Mercury (µg/L)
Total Manganese (µg /L)
Total Nickel (µg /L)
Total Selenium (µg/L)
Total Silver (µg /L)
Total Thallium (µg /L)
Total Barium (µg/L)
Total Boron (µg/L)
Total Cobalt (µg/L)
Total Cyanide (µg/L)
Total Phenols (µg/L)
Nitrate (mg/L)
Nitrite (mg/L)
Dissolved Organic Carbon (mg/L)
Hydrogen Sulfide (mg/L)¹

¹ This parameter need only be analyzed for underground mine discharges.

Section B Schedule of Compliance

A schedule of compliance for limits on discharge of selenium is required for this permit.

The schedule consists of temporally consecutive steps over the term of the permit, each of which must be completed by the specified date.

The completion of all steps shall result in total compliance with all contemporary Virginia laws regarding the selenium load contributed by this permit into state waters as the laws exist at the conclusion of the compliance schedule term.

As of July 2013, the laws define numeric instream concentration standards as chronically no more than 5 micrograms of selenium per liter of water and acutely no more than 20 micrograms of selenium per liter of water. Successful compliance for this permit will be defined as meeting all Virginia instream standards for selenium as they exist on March 25, 2017.

In addition to the steps listed, the permittee shall submit progress reports semi-annually, beginning within six months of the effective date of this permit. Semi-annual reports are due by 25 March and 25 September of each year through the life of the compliance schedule. Semi-annual reports shall include a report of progress of achievement of the current stage of compliance and selenium and flow monitoring data for the reporting term.

The steps of the compliance schedule are as follows:

By September 25, 2014, the permittee shall begin monitoring selenium, along with flow data in Roaring Fork at monitoring station ISMP-6A (MPID 0005386, PN 1600876) twice monthly and at NPDES outfalls 010 and 012 per NPDES permit condition contained in part II, Section A.A. Effluent Limitations and Monitoring Requirements. Watershed areas contributing to outfalls 010 and 012 shall be investigated for sources of selenium. This investigation should include a phased geologic investigation that may include representative rock core samples and high-wall rock samples.

By September 25, 2015, the permittee shall submit a report containing the geologic investigation results, analysis and conclusions as to the source(s) of selenium load. The permittee shall submit a comprehensive design for a passive selenium treatment system, including location of system, load handling projections, system justification, system installation timeframe, life of system projections, and a materials handling plan.

By March 25, 2016, the permittee shall begin construction on passive selenium treatment system which has been reviewed and approved by DMLR.

By September 25, 2016, the permittee shall have concluded construction on passive selenium treatment system and begin monitoring the outlet of the treatment system.

By September 25, 2017, the permittee shall be in compliance of all Virginia instream water quality standards as they exist on this date at the furthest downstream NPDES outlet in the watershed. If the selenium compliance endpoint on this date differs from the numeric selenium limits explicitly given in Section A, Table A, Effluent Limitations and Monitoring Requirements, the standards as they exist on the final date of the compliance schedule shall supersede those

explicitly stated in Section A, Table A of this permit.

No later than 14 calendar days following each compliance schedule milestone date and the final compliance date, the permittee shall submit to DMME either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the case of noncompliance, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

DRAFT PUBLISHED 2014-04-29 EXPIRES 2014-05-29

Section C
Standard NPDES Permit Terms and Conditions

The term Department refers to the Virginia Department of Mines, Minerals, and Energy.

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application, excluding records of monitoring information required by this permit related to sewage sludge use and disposal activities, which shall be retained for a period of at least five years. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Department.

C. Reporting Monitoring Results.

1. The permittee shall submit the results of the monitoring required by this permit not later than 30 days following the quarter in which monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Virginia Department of Mines, Minerals, and Energy
Attn: Water Quality Section
P.O. Drawer 900
Big Stone Gap, VA 24219

2. Monitoring results shall be reported on forms provided, approved or specified by the Department.
3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting format specified by the Department, including electronic submittal.
4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information.

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Department may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges.

Except in compliance with this permit, or another permit issued by the Department, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II Section C (F); or who discharges or causes or allows a discharge that may reasonably be expected

to enter state waters in violation of Part II Section C (F); shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges.

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident (details of any adverse affects on aquatic life and the known number of fish killed must also be reported to DEQ). The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Section C.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Department may waive the written reporting on a case-by-case basis for reports of noncompliance under Part II Section C.I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Part II Section I.1 or Part II Section I.2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II Section I.2.

NOTE: The immediate (within 24 hours) reports required in Part II Section C (G, H and I) may be made to the Department's Big Stone Gap Office Enforcement Section at (276) 523-8199 (voice). For emergencies the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes.

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements.

1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and whose authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
2. Reports, etc. All reports required by permits, and other information requested by the Department shall be signed by a person described in Part II Section C.K.1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II Section C.K.1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
3. Changes to authorization. If an authorization under Part II Section C.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II Section C.K.2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part II Section C.K.1 or 2 shall make the following certification:
- "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply.

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Coal Surface Mining Operation permit, State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply.

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit.

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law.

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" Part II Section C. U, and "upset" (Part II Section C.V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludge

Solids, sludge or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II Section C.U.2 and 3.
2. Notice
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II Section C.I.

3. Prohibition of bypass.

- a. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notice as required under Part II Section C.U.2.
- b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part II Section C.V.3.

V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II Section C.V.2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II Section C.I; and
 - d. The permittee complied with any remedial measures required under Part II Section C.S.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry.

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permitted premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Coal Surface Mining Operation permit, Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions.

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits.

Permits are not transferable to any person except after approval of a succession application by the Department.

Z. Severability.

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and to the remainder of this permit shall not be affected thereby.

AA. Water Quality Criteria Reopener

This permit may be modified or alternatively revoked and reissued to incorporate appropriate limits provided regular or conditional effluent monitoring indicates the need for any water quality-based limitations.

NPDES Permit Definitions

- (A) The term “acid or ferruginous mine drainage” means mine drainage which, before any treatment, either has a pH of less than 6.0 or a total iron concentration equal to or more than 10 mg/l.
- (B) The term “active mine drainage” means the area actively being used or disturbed for the extraction, removal, or recovery of coal from its natural deposits. This excludes areas where reclamation and revegetation has been completed.
- (C) The term “alkaline mine drainage” means mine drainage which, before any treatment, has a pH equal to or more than 6.0 and a total iron concentration less than 10 mg/l.
- (D) “Application” means the EPA standard national forms for applying for a permit, including any additions or modifications to the forms; or forms approved by EPA for use in approved States, including any approved additions or modifications.
- (E) “Approved program or approved State” means a State administered NPDES program which has been approved or authorized by EPA under 40 CFR Part 123.
- (F) “Best management practices” (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters

of the United States. BMPs include treatment requirements, operation procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

- (G) “Coal preparation plant” means a facility where coal is crushed, screened, sized, cleaned, dried, or otherwise prepared and loaded for transit to a consuming facility. “Coal preparation plant associated areas” means the coal preparation plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities. “Coal preparation plant water circuit” means all pipes, channels, basins, tanks, and all other structures and equipment that convey, contain, treat, or process any water that is used in coal preparation processes within a coal preparation plant.
- (H) The term “commingled discharge” means discharges of drainage from underground workings that are mixed or commingled with surface mine drainage.
- (I) “Composite sample” means a combination of individual samples of wastewater taken at 1 hour intervals, for eight (8) hours (or for the duration of discharge, whichever is less), to minimize the effect of variability of the individual samples. Individual samples must be of equal volume. (Example: one (1) liter per hour.)
- (J) The term “controlled discharge” means any surface mine drainage that is pumped or siphoned from the active mining area.
- (K) “CWA” means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) Public Law 92-500 as amended by Public Law 95-217, and Public Law 95-576, 33 U.S.C. 1251 et seq.
- (L) The “daily maximum” discharge means the total mass of a pollutant discharged during the calendar day. Where the pollutant is limited in terms other than mass, the daily maximum shall mean the average concentration or other measurement specified during the calendar day or other specified sampling day.
- (M) The “instantaneous maximum” means the level not to be exceeded at any time in any grab sample.
- (N) “Discharge (of a pollutant)” means any addition of any pollutant or combination of pollutants to waters of the United States from any point source; or any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.
- (O) “Existing source or existing discharger (in the NPDES program)” means any source which is not a new source or new discharger.
- (P) “Effluent limitation” means any restriction imposed by the Director on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.
- (Q) “Effluent limitation guideline” means a regulation published by the Administration under Section 304(b) of the CWA to adopt or revise effluent limitations.
- (R) “Environmental Protection Agency (EPA)” means the United States Environmental Protection Agency.

- (S) “Estimate” means to be based on technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters, and batch discharge volumes.
- (T) “Grab sample” means an individual sample collected in less than 15 minutes.
- (U) “Measured Flow” means any method of liquid volume measurement the accuracy of which has been previously demonstrated in engineering practices, or for which a relationship to absolute volume has been obtained.
- (V) “Mine drainage” means any drainage, and any water pumped or siphoned from an active mining area or a post-mining area. The abbreviation “ml/l” means milliliters per liter.
- (W) The “monthly average” discharge means the total mass (and concentration if appropriate) of all daily discharges sampled and/or measured properly during a calendar month divided by the number of daily discharges sampled and/or measured properly during such month.
- (X) The “monthly average” temperature means the arithmetic mean of temperature measurements made on an hourly basis, or mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar month, or during the operating month if flows are of shorter duration.
- (Y) “National Pollutant Discharge Elimination System (NPDES)” means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits and imposing and enforcing pretreatment requirements under Sections 307, 318, 402, and 405 of CWA. The term includes an approved program.
- (Z) “New discharger” means any building, structure, facility, or installation: (A) From which there is or may be a new or additional discharge of pollutants at a site at which on October 18, 1972, it had never discharged pollutants; (B) Which has never received a finally effective NPDES permit for discharges at that site; and (C) Which is not a “new source”. This definition includes an indirect discharger, which commences discharging into waters of the United States. It also includes any existing mobile point source, such as an offshore oil drilling rig, seafood processing vessel, or aggregate plant that begins discharging at a location for which it does not have an existing permit.
- (AA) “NA” means effluent limitations and monitoring requirements not required.
- (BB) “NL” means no limitation on the affected parameters, however monitoring is required.
- (CC) “Outfall” means a point source.
- (DD) “Permit” means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR Parts 122, 123, and 124.
- (EE) “Point source” means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.
- (FF) “Pollutant” means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials [except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. Section 2011 et seq.)], heat

wrecked or discarded equipment, rocks, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

- (GG)** The term “post-mining area” means: (1) A reclamation area or (2) the underground workings of an underground coal mine after the extraction, removal, or recovery of coal from its natural deposit has ceased and prior to bond release.
- (HH)** The term “10-year, 24-hour precipitation event” means the maximum 24-hour precipitation event with a probable recurrence interval of once in ten years as defined by the National Weather service and Technical Paper No. 40, “Rainfall Frequency Atlas of the U.S.,” May 1962, or equivalent regional or rainfall probability information developed there from.
- (II)** The term “qualifying rainfall event” means the rainfall amounts as defined; active mine areas = 0.2”/24 hours, refuse areas = 2.5”/24 hours, controlled and reclaimed = 4.4”/24 hour.
- (JJ)** The term “reclamation area” means the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically seeding or planting) work has commenced. The term “pre-reclamation area” means the surface area of a coal mine prior to reclamation.
- (KK)** The term “settleable solids” is that matter measured by the volumetric method that is determined by the following procedure: (a) fill an Imhoff cone to the one-liter mark with a thoroughly mixed sample. Allow to settle undisturbed for 45 minutes. Gently stir along the inside surface of the cone with a stirring rod. Allow to settle undisturbed for 15 minutes longer. Record the volume of settled material in the cone as milliliters per liter. The method detection limit for coal mining point sources is 0.4 ml/l.
- (LL)** The terms “treatment facility” and “treatment system” means all structures which contain, convey, and as necessary, physically or chemically treat coal mine drainage, coal preparation process water, surface runoff from disturbed areas, or drainage from coal preparation plant associated areas, which remove pollutants regulated by the Part from such waters. This includes all pipes, channels, ponds, basins, tanks, and all other equipment serving such structures.
- (MM)** The terms “underground mine drainage or discharge” mean discharges from the underground workings of underground mines until SMCRA bond release.
- (NN)** The “weekly average” discharge means the total concentration and mass of all daily discharges sampled and/or measured during a calendar week divided by the number of daily discharges sampled and/or measured during such week.
- (OO)** The term “coal refuse disposal pile” means any coal refuse deposited on the earth and intended as permanent disposal or long term storage (greater than 180 days) of such material, but does not include coal refuse deposited within the active mining area or coal refuse never removed from the active mining area.

Section D
Other Permit Requirements

NPDES Permit Special Conditions

(AA) Water Quality Monitoring

The Department may require every owner to furnish such plans, specifications, or other pertinent information as may be necessary to determine the effect of the discharge on the water quality or such information as may be necessary to accomplish the purposes of the CWA, including but not limited to chemical and biological testing. The permittee shall obtain and record such information on the receiving waters as requested by the Department. The information shall be subject to inspection by authorized State and Federal representatives and shall be submitted with such frequency and in such detail as requested by the Department.

(BB) Management Requirements

1. All discharges authorized by this NPDES permit shall be made in accordance with the terms and conditions of the permit. The Department must be notified at least thirty (30) days prior to all expansions, production increases, or process modifications that will result in new or increased discharge(s) of pollutant(s). Notification should be by submission of a new or revised CSMO/NPDES application, or, if such discharge(s) does not violate effluent limitations specified in the permit, by submission to the Department of notice of such new or increased discharge of pollutant(s). All expansions, production increases, or process modifications that will result in new or increased discharge(s) of pollutant(s) must be approved by the Department prior to implementation.
2. The discharge of any pollutant limited in the permit more frequently than, or at a level greater than that identified and authorized by this permit, shall constitute a violation of the terms and conditions of this permit.
3. The discharge of any pollutant(s) from this facility that enters into a water body with an existing and approved Total Maximum Daily Load (TMDL) must be made in compliance with the TMDL and any applicable TMDL implementation plan. If the discharge enters into a water body included on the state's current 303(d) list not having an existing and approved TMDL, the discharge of any pollutant(s) from this facility cannot be the cause of the stream's impairment and 303(d) listing.

(CC) Availability of Reports

Except for data determined to be confidential under Section 308 of the Clean Water Act (CWA), all reports prepared in accordance with the terms and conditions of this permit will be available for public inspection at the Department office. As required by the Act, effluent data will not be considered confidential. Knowingly making false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA and in Section 62.1-44.32 of the Code of Virginia.

(DD) Permit Modification and Reissuance

This permit shall be modified, or alternatively, revoked and reissued, to comply with any

applicable effluent standard or limitation issued or approved under Section 301(b)(2)(C) and (D), 304 (b)(2), and 307 (a)(2) of the CWA, if the effluent standard or limitations so issued or approved:

(i) Contain different conditions or is otherwise more stringent than any effluent limitation in the permit; or

(ii) Control any pollutant not limited in the permit; or

(iii) The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act as applicable.

(iv) Immediately after EPA's promulgation of applicable standards or limitations, a draft permit incorporating the new requirements shall be sent to the permittee.

(EE) State Law

1. Compliance with this permit during its term constitutes compliance with the Virginia State Law and CWA except for any standard imposed under Section 307 of the CWA for a toxic pollutant injurious to human health.
2. State water quality standards contain an antidegradation policy that is applicable to this permit, facility, and discharge(s). Effluent limitations assigned to this permit require the operator to utilize the best available technology to treat all discharges and to protect water quality. As a condition of this permit the permittee must take appropriate measures to comply with the antidegradation policy.
3. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other State law or regulation or under authority preserved by Section 510 of the CWA.

(FF) Toxic Pollutants

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the CWA for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revoked and reissued or modified in accordance with the toxic effluent standard or prohibition. Any effluent standard or prohibition established under Section 307(a) for a toxic pollutant injurious to human health is effective and enforceable by the time set forth in the promulgated standard, even absent permit modification.

(GG) Chemical Treatment

Chemical treatment is not permitted unless specified in Part I Section 5.15 of the CSMO/NPDES permit application or otherwise specifically authorized by the Department. Treatment chemicals will be utilized in accordance with manufacturer's specifications and in quantities not harmful to aquatic life.

(HH) Alternate effluent limitations applicable to precipitation events

- ☒ The permit includes a special condition which provides an exclusion of the TSS, total iron and total manganese limitations during periods of runoff from a qualifying precipitation event as referenced in 40 CFR 434. TSS is to be collected and reported at all times, even when the AEL is utilized.
- ☐ The watershed has been designated as impaired (benthic impairment). Since the TMDL identifies TSS as a stressor, alternate effluent limitations for TSS are not applicable to the outfalls on this permit. Alternate effluent limitations for total iron and total manganese are applicable, consistent with 40 CFR 434. The AEL (Alternate Effluent Limit) is the minimum rainfall event necessary for alternate effluent limitations to apply to the specified parameter for the given outfall.

CSMO Permit Special Conditions:

- (a) Disposal of non-coal waste onsite is prohibited.
- (b) Water from sediment control ponds may be used on site for the purpose of dust suppression. Dust suppression shall be carried out as a best management practice provided that ponding or direct runoff from the site does not occur during or immediately following its application. Dust suppression shall not be employed as a wastewater disposal method.
- (c) No disturbance is allowed within any jurisdictional waters, whether water of the United States or waters of the Commonwealth of Virginia (including jurisdictional isolated waters), without first obtaining a Section 404 of the Clean Water Act (CWA) permit from the U.S. Army Corps of Engineers and / or a Section 401 of the CWA Certification from the Virginia Department of Environmental Quality.
- (d) Prior to disturbing any area not included in the approved permit an application for a permit revision / amendment must be submitted to the Department of Mines, Minerals and Energy (DMME) / Division of Mined Land Reclamation (DMLR) and the application must be approved with appropriate fees and bond submitted to DMLR.
- (e) The Department shall conduct reviews of the approved permit pursuant to 4VAC25-130-774.11. Based upon the Department review DMLR may order the revision of the permit pursuant to 4VAC25-130-774.11(b) and (c).
- (f) Biological surveys will be conducted in accordance with the language in Part II Section A.E Stream Monitoring Conditions of the NPDES permit.
- (g) To ensure continuing decrease in TDS for the Cumulative Impact Area, best management practices (BMPs), verified offsets, and/or mitigation activities proposed in Part II Section A.D of the NPDES permit should be completed prior to or concurrent with commencement of mining on the proposed permit.

TMDL Special Conditions:

(a) TMDL Reopener Clause

This permit shall be modified or alternately revoked and reissued if any approved waste load allocation procedure, pursuant to Section 303(d) of the CWA, imposes waste load allocations, limits or other conditions on the facility that are not consistent with the requirements of this permit.

(b) Numeric Effluent Limitation - Annual Wasteloads

The permittee shall ensure that discharges from permitted point sources comply with the concentration based numeric effluent limitations assigned in Part II Section A of the joint CSMD/NPDES Permit and that permitted point source discharges shall not exceed the numeric waste loads of pollution defined in this permit.

1. Tracking of mining waste loads, waste load offsets, calculations of mining waste loads, and comparisons of mining waste loads to allocations will be performed by the Department's TMDL software program. Discharges by the permitted point sources resulting in a total waste load which exceeds TMDL limits will be determined as described in Part II Section A and Part II Section D of this permit.

Mining waste load limitations shall be as follows:

- A) Discharges from this permit may not in aggregate, or alone, exceed the mining waste load allocation within the respective TMDL watershed, and
 - B) Discharges from this permit in combination with all permitted mining discharges may not exceed the mining waste load allocation within the respective TMDL watershed.
 - C) If the permit has an approved TMDL offset, mining waste load limitations will be as described in Part II, Section A.D Applicable Mining Waste Load Offsets.
2. If the Department determines that waste loads from the permitted point sources have resulted in or will result in a waste load in excess of the TMDL WLAs, the Department will require the permittee to conduct additional monitoring according to a schedule established by the Department. Based upon the monitoring results, the Department will confer with the permittee to develop reduction actions that may include revised and additional BMPs, as well as flow measurements and other monitoring. If within 90 days of receipt of the final required monitoring results the Department and the permittee cannot come to agreement on the necessary reduction actions and a schedule for their implementation, then the Department may modify or revoke and reissue the NPDES permit to assign permit-specific reduction actions and an implementation schedule. Failure by the permittee to comply with any such permit requirements will constitute grounds for enforcement.

The permittee shall be responsible for achieving all concentration and loading based effluent limitations assigned by the permit. The permittee shall be responsible for implementing all best management practices and/or TMDL waste load reduction actions specified in the permit.

(c) Waste load Offset Credit

The Department will use its existing TMDL database and software to maintain the accounting of load reduction credit tracking.

(d) NPDES Discharge Monitoring Plan

Referenced in Part II Section A

(e) Offset Monitoring Plan (if applicable)

The offset ratio for this permit is sufficient to assure that adequate pollution reductions will be accomplished without additional monitoring requirements beyond those previously identified in this joint permit.

The offset ratio is found in the TMDL Addendum in Part I Section 6.2 of the joint CSMO/NPDES permit. The minimum offset ratio is 2:1.

(f) Unanticipated Failure of Offset (if applicable)

Prior to the release of any performance bond on this permit, the Department shall determine if the permittee has completed offset requirements. The offset completion timing is outlined in Part I Section 6.1 of the joint CSMO/NPDES permit. If the permittee fails to complete the required offset, an alternative offset project must be approved by the Department and implemented prior to the release of any performance bond on this permit.

(g) Responsibility to Achieve All Effluent Limitations in Permit

The permittee shall be responsible for achieving all concentration and loading based effluent limitations assigned by this permit. The permittee shall be responsible for implementing all best management practices and/or TMDL Waste Load Reduction Actions required by this permit.

(h) Best Management Practices

The permittee shall be responsible for implementing applicable BMPs as noted in DMLR Guidance Memorandum 14-05 and/or BMPs included in Sections 5.15 and 6.1 of the joint permit application.

Total Maximum Daily Load (TMDL) Compliance and Documentation:

The Department finds that the permit will comply with the approved TMDL and the TMDL Waste Load Allocation (WLA). The permit is consistent with the TMDL WLA pursuant to 40 CFR 122.44

(d)(1)(viii)(B).

DRAFT PUBLISHED 2014-04-29 EXPIRES 2014-05-29

VIRGINIA DIVISION OF MINED LAND RECLAMATION

Joint CSMO/NPDES Permit Factsheet

Application Number 1006884

CSMO: 1101760

NPDES: 0081760

This document gives pertinent information concerning the joint Coal Surface Mining Operation (CSMO)/ National Pollutant Discharge Elimination System (NPDES) permit listed below. This permit is being processed as a **Minor Source** industrial permit. The industrial discharge(s) result from the control of surface water runoff and/or groundwater discharges associated with coal mining activities.

The permit process consists of: developing permit limitations based upon the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR 434, the State Water Quality Standards, Total Maximum Daily Load (TMDL) Regulations, and Storm Water guidelines.

The effluent limitations contained in this permit will maintain all applicable state and federal standards, including the Water Quality Standards of 9 VAC 25-260-100 et seq., the Virginia Coal Surface Mining and Reclamation Regulations, and TMDLs.

1. Facility Information

Permittee Name: RED RIVER COAL COMPANY, INC.

Address: P. O. BOX 668

City: NORTON **State:** VA **Zip:** 24273

Facility: BACKBONE RIVER SURFACE MINE

Location:

Description: 6.7 MP L E S NE OF NORTON ON ROGERS & AMOS RIDGE

NAD 83 Virginia State Plane South Northing: 4054835.2926

NAD 83 Virginia State Plane South Easting: 10256944.1124

County: WISE

USGS 7.5' Quadrangle: FLAT GAP

Type of Mining

CSMO/NPDES Permit Renewal (TEP)

2. CSMO/NPDES Permit Number:

CSMO: 1101760

NPDES: 0081760

Permit Expiration Date: 10/20/2015

Former NPDES Permit Number: N/A

Former CSMO Permit Number: N/A

3. Owner Contact:

Operator: JAMES M. THOMAS

Telephone: (276)679-1400

4. **Administrative Dates:**

Administratively Complete Date: 07/27/2010

NPDES Reviewer Contact: Scott Williams (276)523-8100

Review Begin Date: 07/27/2010

Public Comment Beginning Date: 08/20/2010 (1st publication, COALFIELD PROGRESS (Norton))

Public Comment Ending Date: 09/19/2010 (30 days following last publication, COALFIELD PROGRESS (Norton))

Informal Conference Dates: N/A

Application Approval Date: Pending

Original Permit Issue Date: 10/20 /2000

5. **Application Information:**

Application Type: RENEWAL C/N

Application Description: CSMO/NPDES Permit Renewal (TEP)

6. **Receiving Waters Classification:**

Stream Name	Stream Code	Watershed	Basin
CANEPATCH CREEK	128	POWELL - ROARING FORK	TENNESSEE
ROARING FORK	129	POWELL - ROARING FORK	TENNESSEE
POUND FORK	142	POWELL - ROARING FORK	TENNESSEE
BUCKEYE BRANCH	136	POWELL-POWELL RIVER DORCHESTER	TENNESSEE
POWELL RIVER	2	POWELL RIVER	TENNESSEE

7. **Ambient Water Quality Description**

Background/baseline ambient water quality information on receiving streams is located in Section 5.9 of the joint permit application. None of the outfalls are limited by receiving stream flows, therefore drought flow frequencies are not provided.

Receiving Stream Ambient Water Quality

Parameter	Flow (gpm)	pH	Total Fe (mg/L)	Total Mn (mg/L)	TSS (mg/L)	Temp °C	Acidity (mg/L CaCO ₃ equiv.)	Alkalinity (mg/L CaCO ₃ equiv.)	Conductivity (µS)	TDS (mg/L)	Sulfate (mg/L)
BR-3											
AVERAGE	3894.2	7.8	0.7	0.1	14.9	13.0	0.0	202.6	1334.5	995.9	539.2
MINIMUM	1900.0	7.5	0.2	0.1	0.0	5.0	0.0	135.0	1063.0	752.0	358.0
MAXIMUM	6800.0	8.3	2.9	0.3	67.0	19.0	0.0	304.0	1549.0	1222.0	754.0
STD DEV	1353.7	0.2	0.7	0.1	15.5	4.3	0.0	34.3	114.5	97.7	82.2
MEDIAN	3700.0	7.8	0.6	0.1	11.0	13.0	0.0	200.0	1346.0	1000.0	537.0
BR-4											
AVERAGE	4945.0	7.9	0.7	0.2	14.8	12.1	0.0	181.2	1273.7	951.7	519.5
MINIMUM	2900.0	7.5	0.2	0.0	0.0	3.0	0.0	108.0	863.0	666.0	303.0
MAXIMUM	10000.0	8.2	6.6	0.6	132.0	20.0	0.0	234.0	1530.0	1142.0	624.0
STD DEV	1435.4	0.2	1.3	0.2	24.0	5.1	0.0	30.1	146.6	100.9	83.5
MEDIAN	5000.0	7.9	0.7	0.1	9.0	12.0	0.0	180.0	1285.0	950.0	530.0
BR-5											
AVERAGE	9.5	7.6	0.2	0.0	5.5	12.0	0.0	79.9	537.0	375.4	180.7
MINIMUM	0.0	7.0	0.0	0.0	0.0	4.0	0.0	29.0	227.0	186.0	45.0
MAXIMUM	50.0	8.2	1.0	0.0	35.0	18.0	0.0	184.0	699.0	564.0	251.0
STD DEV	13.9	0.3	0.2	0.0	6.9	4.5	0.0	29.4	105.5	86.9	47.4
MEDIAN	2.0	7.6	0.1	0.0	5.0	12.0	0.0	75.0	548.0	376.0	190.0
BR-6											
AVERAGE	14.7	6.1	0.4	0.0	6.3	11.8	1.4	34.8	46.0	58.2	7.6
MINIMUM	0.0	5.5	0.1	0.0	0.0	4.0	0.0	4.0	14.0	0.0	3.0
MAXIMUM	56.0	6.7	1.0	0.1	24.0	17.0	30.0	114.0	109.0	160.0	18.0
STD DEV	15.4	0.3	0.3	0.0	6.8	3.5	5.8	31.9	22.7	41.5	3.9
MEDIAN	10.0	6.2	0.4	0.0	5.0	13.0	0.0	27.0	38.0	48.0	6.0
BR-8											
AVERAGE	510.1	7.7	0.8	0.1	13.1	11.8	0.0	172.9	907.7	650.8	293.9
MINIMUM	200.0	6.7	0.0	0.0	0.0	4.0	0.0	58.0	483.0	288.0	121.0
MAXIMUM	2000.0	8.1	3.9	0.4	73.0	21.0	0.0	266.0	1444.0	1014.0	542.0
STD DEV	317.4	0.3	0.9	0.1	14.9	5.2	0.0	53.0	195.7	157.5	102.5
MEDIAN	450.0	7.8	0.5	0.1	8.0	11.0	0.0	166.0	918.0	646.0	282.0

8. Permit Characterization/Special Conditions/Effluent Limitations:

- ☒ Narrative Water Quality Standards Applicable
9VAC25-260-20
Discharges from this operation must not cause the violation of any applicable narrative instream water quality standards.
- ☒ Technology-based Effluent Limitations Applicable
40 CFR 434
- ☒ Numeric Water Quality based Effluent Limitations Applicable
9VAC25-260-140
Discharges from this operation must not cause the violation of any applicable numeric instream water quality standards.
- ☒ SMCRA Performance Standard
4VAC25-130-816.42 and/or 4VAC25-130-817.42
- ☒ Standard Permit Conditions Applicable
40 CFR 122.41 and 9VAC25-31-190
The outfalls, discharges, and related activities associated with the proposed operation must individually and in aggregate remain in compliance with the requirements stated in sections 318, 402, and 405 of the Clean Water Act. Additionally, the permittee must comply with all conditions attached to the permit, including but not limited to the effluent standards established under 307(a) of the Clean Water Act. The permittee is bound to all duties, procedures, and requirements laid out in both Federal Regulation 40 CFR 122.41 and State Regulation 9VAC25-260.
- ☒ Special Permit Conditions – TMDL Watershed
40 CFR 130 and CWA 303(d)
The application includes outfalls and/or discharges falling within established boundaries of the TMDL Watershed(s) Powell River due to established stressor(s) Total Suspended Solids. Therefore, special permit conditions as defined in the regulations cited above are applicable to the permit.
- ☒ Special Permit Conditions – SMCRA
4VAC25-130-773-17
- ☐ Special Permit Conditions – Alternate Effluent Limitations: Remining
4VAC25-130-825
- ☐ Discharges limited based on receiving stream flow – Mixing Zone
9VAC260-20
- ☐ Possible Interstate Effect
This permit is not permitted to cross state boundaries or otherwise require Virginia interstate regulations.

9. NPDES Effluent Limitation Basis

The monitoring frequency and sample type have been established after considering the consistency and nature of these operations, the existing analytical data and the potential environmental risk and consequences of the discharges. Reporting of monitoring data is required quarterly.

Parameter	Basis
Flow	Report only, no limit. Monitoring required by federal effluent guidelines (40 CFR Part 434).
pH	The pH limitation is based upon Virginia's water quality standards and federal effluent guidelines (40 CFR Part 434).
Total Suspended Solids	TSS limitations are based on federal effluent guidelines for coal mining (40 CFR Part 434). TSS is also load-limited based upon the approved TMDL, if applicable.
Total Dissolved Solids	Monitoring required for informational purposes. TDS is also load-limited based upon the approved TMDL, if applicable.
Iron, total	Iron limitations are based on 40-CFR-434 criteria for surface water.
Manganese, total	Manganese limitations are based on 40-CFR-434 criteria for surface water.
Selenium, total	Selenium limitations are based on 40-CFR-434 criteria for surface water.
Acute WET	WET limitations are based on 9 VAC 25-31-220 D criteria for surface water.
Chronic WET	WET limitations are based on 9 VAC 25-31-220 D criteria for surface water.

10. Permit or Proposed Permit Area Questions

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	A. The area contains a publicly owned treatment works which discharge into the waters of the United States.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	B. The facility treats, stores, or disposes of hazardous wastes.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	C. Fluids are injected at this facility which are: (1) brought to the surface in connection with conventional oil or natural gas production; (2) used for the enhanced recovery of oil or natural gas; or (3) for storage of liquid hydrocarbons.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	D. The area contains a concentrated animal feeding operation or aquatic animal production facility that discharges into the waters of the United States.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	E. This facility will inject industrial effluent below the lowermost stratum containing, within 1 quarter mile of the well bore, underground sources of drinking water.

11. NPDES Outfall Description:

Sediment control structures and the associated NPDES outfalls for surface coal mining operations primarily receive precipitation runoff from mined areas and treat the runoff by settling sediment particles prior to discharge to the receiving stream. Precipitation runoff from mined areas also dissolves portions of exposed fresh rock and carries the associated ions in solution. These ions may not be reduced in the sedimentation process prior to discharge. Certain dissolved ions or the combined concentration of these ions may cause benthic impairment depending on their makeup and/or abundance.

NPDES discharges associated with this permit are from the control of surface water runoff resulting from precipitation and/or groundwater discharges associated with coal mining activities. Typically, discharges are only treated by sedimentation, but in limited circumstances treatment may include chemical treatment such as the addition of neutralizing agents or flocculants.

There are 22 outfalls associated with this permit. Of all total outfalls, 22 were previously approved, and of all previously approved outfalls, 19 have been constructed. The constructed outfalls are 029,031A,032,009,010,012,002,019,020,025,030A,031,028,001A,001B,021B,022,023 and 026.Outfall 029 historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 98 measurements. Outfall 031A historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 296 measurements. Outfall 032 historically has discharged 93.85% of the time with an estimated flow of 54.25 GPM averaged over 358 measurements. Outfall 009 historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 162 measurements. Outfall 010 historically has discharged 97.77% of the time with an estimated flow of 49.67 GPM averaged over 224 measurements. Outfall 012 historically has discharged 99.67% of the time with an estimated flow of 215.05 GPM averaged over 300 measurements. Outfall 002 historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 78 measurements. Outfall 019 historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 297 measurements. Outfall 020 historically has discharged 99.33% of the time with an estimated flow of 81.30 GPM averaged over 299 measurements. Outfall 025 historically has discharged 31.13% of the time with an estimated flow of 7.90 GPM averaged over 151 measurements. Outfall 030A historically has discharged 3.05% of the time with an estimated flow of 0.41 GPM averaged over 295 measurements. Outfall 031 historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 84 measurements. Outfall 028 historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 98 measurements. Outfall 001A historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 78 measurements. Outfall 001B historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 88 measurements.

Outfall 021B historically has discharged 1.14% of the time with an estimated flow of 0.24 GPM averaged over 176 measurements. Outfall 022 historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 175 measurements. Outfall 023 historically has discharged 99.38% of the time with an estimated flow of 35.70 GPM averaged over 162 measurements. Outfall 026 historically has discharged 0.00% of the time with an estimated flow of 0.00 GPM averaged over 131 measurements. Outfall 027 has not yet been constructed. It has a watershed acreage of 49.3 and has a low estimated probability of discharge. Outfall 011 has not yet been constructed. It has a watershed acreage of 16 and has a low estimated probability of discharge. Outfall 001A-T has not yet been constructed. It has a watershed acreage of 96.8 and has a low estimated probability of discharge.

Proposed Discharges

There are no proposed outfalls included in the application.

The following tables present details for each proposed and/or existing outfall. Specific information, including location, regarding each outfall and facility is also found in Section 5, Section 12, and Section 21 of the CSMO/NPDES permit.

MPID Number:	Action:	Sampling Freq/Qtr: 6	Location Number:
0003984			026
Elevation: 0	Facility Location: 26	Quad: NORTON	Northing: 3545628.5358
Easting: 10251837.7899	Watershed Acres: 34.5	Disturbed Acres: 9.3	Receiving Stream: ROARING FORK

MPID Number:	Action:	Sampling Freq/Qtr: 6	Location Number:
0003982			023
Elevation: 0	Facility Location: 23	Quad: NORTON	Northing: 3547656.5853
Easting: 10251765.7914	Watershed Acres: 77.2	Disturbed Acres: 25.3	Receiving Stream: ROARING FORK

MPID Number:	Action:	Sampling Freq/Qtr: 6	Location Number:
0003981			022
Elevation: None	Facility Location: 22	Quad: NORTON	Northing: 3548089.5197
Easting: 10251546.3832	Watershed Acres: 15.2	Disturbed Acres: 14.1	Receiving Stream: ROARING FORK

MPID Number:	Action:	Sampling Freq/Qtr: 6	Location Number:
0003980			021B
Elevation: None	Facility Location: 21B	Quad: NORTON	Northing: 3548319.7537
Easting: 10252186.3577	Watershed Acres: 79.9	Disturbed Acres: 79.9	Receiving Stream: ROARING FORK

MPID Number:	Action:	Sampling Freq/Qtr: 6	Location Number:
0003967			001B
Elevation: None	Facility Location: 1B	Quad: FLAT GAP	Northing: 3559728.5878
Easting: 10255627.3429	Watershed Acres: 129.2	Disturbed Acres: 23.1	Receiving Stream: POWELL RIVER

MPID Number: 0003966	Action:	Sampling Freq/Qtr: 6	Location Number: 001A
Elevation: None	Facility Location: 1A	Quad: FLAT GAP	Northing: 3560995.9032
Easting: 10256046.4109	Watershed Acres: 67.7	Disturbed Acres: 67.7	Receiving Stream: POWELL RIVER

MPID Number: 0003986	Action:	Sampling Freq/Qtr: 6	Location Number: 028
Elevation: None	Facility Location: 28	Quad: NORTON	Northing: 3542884.0045
Easting: 10252130.9541	Watershed Acres: 31.6	Disturbed Acres: 31.6	Receiving Stream: CANEPATCH CREEK

MPID Number: 0003990	Action:	Sampling Freq/Qtr: 6	Location Number: 031
Elevation: None	Facility Location: 31	Quad: NORTON	Northing: 3547894.6916
Easting: 10256549.5091	Watershed Acres: 15.7	Disturbed Acres: 9.2	Receiving Stream: BUCKEYE BRANCH

MPID Number: 0003989	Action:	Sampling Freq/Qtr: 6	Location Number: 030A
Elevation: None	Facility Location: 30A	Quad: NORTON	Northing: 3546411.5165
Easting: 10257196.0405	Watershed Acres: 11.4	Disturbed Acres: 8.8	Receiving Stream: CANEPATCH CREEK

MPID Number: 0003983	Action:	Sampling Freq/Qtr: 6	Location Number: 025
Elevation: 0	Facility Location: 25	Quad: NORTON	Northing: 3546635.5653
Easting: 10251963.7915	Watershed Acres: 22.3	Disturbed Acres: 22.3	Receiving Stream: ROARING FORK

MPID Number: 0003979	Action:	Sampling Freq/Qtr: 6	Location Number: 020
Elevation: None	Facility Location: 20	Quad: NORTON	Northing: 3548925.0708
Easting: 10252244.454	Watershed Acres: 98.9	Disturbed Acres: 18.1	Receiving Stream: ROARING FORK

MPID Number: 0003978	Action:	Sampling Freq/Qtr: 6	Location Number: 019
Elevation: None	Facility Location: 19	Quad: NORTON	Northing: 3549692.898
Easting: 10251244.74	Watershed Acres: 58.1	Disturbed Acres: 55.8	Receiving Stream: ROARING FORK

MPID Number: 0003965	Action:	Sampling Freq/Qtr: 6	Location Number: 001A-T
Elevation: None	Facility Location: 1A-T	Quad: FLAT GAP	Northing: 3560234.9046
Easting: 10255677.453	Watershed Acres: 96.8	Disturbed Acres: 8.6	Receiving Stream: POWELL RIVER

MPID Number: 0003968	Action:	Sampling Freq/Qtr: 6	Location Number: 002
Elevation: None	Facility Location: 2	Quad: FLAT GAP	Northing: 3563055.172
Easting: 10251934.766	Watershed Acres: 157.2	Disturbed Acres: 157.2	Receiving Stream: POUND FORK
MPID Number: 0003977	Action:	Sampling Freq/Qtr: 6	Location Number: 012
Elevation: None	Facility Location: 12	Quad: FLAT GAP	Northing: 3551043.9128
Easting: 10251161.8755	Watershed Acres: 547.9	Disturbed Acres: 113	Receiving Stream: ROARING FORK
MPID Number: 0003976	Action:	Sampling Freq/Qtr: 6	Location Number: 011
Elevation: None	Facility Location: 11	Quad: FLAT GAP	Northing: 3551759.6636
Easting: 10250568.7941	Watershed Acres: 16	Disturbed Acres: 11.2	Receiving Stream: ROARING FORK
MPID Number: 0003975	Action:	Sampling Freq/Qtr: 6	Location Number: 010
Elevation: None	Facility Location: 10	Quad: FLAT GAP	Northing: 3552381.958
Easting: 10250157.225	Watershed Acres: 48.2	Disturbed Acres: 48.2	Receiving Stream: ROARING FORK
MPID Number: 0003974	Action:	Sampling Freq/Qtr: 6	Location Number: 009
Elevation: None	Facility Location: 9	Quad: FLAT GAP	Northing: 3553555.9887
Easting: 10249796.5336	Watershed Acres: 30	Disturbed Acres: 30	Receiving Stream: ROARING FORK
MPID Number: 1684723	Action:	Sampling Freq/Qtr: 6	Location Number: 032
Elevation: 0	Facility Location: 032	Quad: NORTON	Northing: 3549731.8736
Easting: 10250473.1973	Watershed Acres: 33.4	Disturbed Acres: 26.4	Receiving Stream: ROARING FORK
MPID Number: 0003991	Action:	Sampling Freq/Qtr: 6	Location Number: 031A
Elevation: None	Facility Location: 31A	Quad: NORTON	Northing: 3547592.4545
Easting: 10257798.2915	Watershed Acres: 25.7	Disturbed Acres: 7	Receiving Stream: BUCKEYE BRANCH
MPID Number: 0003987	Action:	Sampling Freq/Qtr: 6	Location Number: 029
Elevation: None	Facility Location: 29	Quad: NORTON	Northing: 3542497.9013
Easting: 10254719.8953	Watershed Acres: 275.2	Disturbed Acres: 127.4	Receiving Stream: CANEPATCH CREEK

MPID Number: 0003985	Action:	Sampling Freq/Qtr: 6	Location Number: 027
Elevation: None	Facility Location: 27	Quad: NORTON	Northing: 3544686.3097
Easting: 10251026.6487	Watershed Acres: 49.3	Disturbed Acres: 25.5	Receiving Stream: ROARING FORK

12. Instream Monitoring Description:

Instream monitoring requirements and locations are addressed in Sections 5.7, 5.10, and 21.2 of the joint CSMO/NPDES permit. Location details for each instream monitoring site are tabulated below:

MPID Number: None	Action: A	Sampling Freq/Qtr: 0	Location Number: C-P10
Facility Location: outfall	Quad: FLAT GAP	Northing: 3552381.958	Easting: 10250157.225
Stream: ROARING FORK			

MPID Number: None	Action: A	Sampling Freq/Qtr: 0	Location Number: C-P12
Facility Location: outfall	Quad: FLAT GAP	Northing: 3551043.9128	Easting: 10251161.875
Stream: ROARING FORK			

MPID Number: None	Action: A	Sampling Freq/Qtr: 0	Location Number: BRFK-4
Facility Location: downstream	Quad: NORTON	Northing: 3545883.651	Easting: 10249418.886
Stream: ROARING FORK			

MPID Number: None	Action: A	Sampling Freq/Qtr: 0	Location Number: BRFK-3
Facility Location: downstream	Quad: FLAT GAP	Northing: 3551128.598	Easting: 10250303.345
Stream: ROARING FORK			

MPID Number: None	Action: A	Sampling Freq/Qtr: 0	Location Number: BRFK-2
Facility Location: upstream	Quad: FLAT GAP	Northing: 3553242.244	Easting: 10249449.993
Stream: ROARING FORK			

MPID Number: None	Action: A	Sampling Freq/Qtr: 0	Location Number: BRFK-1
Facility Location: upstream	Quad: FLAT GAP	Northing: 3555663.014	Easting: 10248517.247
Stream: ROARING FORK			

MPID Number: 0007734	Action: A	Sampling Freq/Qtr: 0	Location Number: BPR-1
Facility Location: upstream	Quad: FLAT GAP	Northing: 3555424.442	Easting: 10258167.585
Stream: POWELL RIVER			

MPID Number: None	Action: A	Sampling Freq/Qtr: 0	Location Number: BCPT-1
Facility Location: Downstream	Quad: NORTON	Northing: 3569768.616	Easting: 10253771.908
Stream: CANEPATCH CREEK			

MPID Number: 0004004	Action:	Sampling Freq/Qtr: 3	Location Number: BR-8
Facility Location: DOWNSTREAM	Quad: NORTON	Northing: 3538705.7458	Easting: 10252101.1556
Stream: CANEPATCH CREEK			

MPID Number: 0004003	Action:	Sampling Freq/Qtr: 3	Location Number: BR-7
Facility Location: UPSTREAM	Quad: NORTON	Northing: 3541826.435	Easting: 10257359.5973
Stream: CANEPATCH CREEK			

MPID Number: 0004002	Action:	Sampling Freq/Qtr: 3	Location Number: BR-6
Facility Location: DOWNSTREAM	Quad: NORTON	Northing: 3548373.2198	Easting: 10259194.8252
Stream: BUCKEYE BRANCH			

MPID Number: 0004001	Action:	Sampling Freq/Qtr: 3	Location Number: BR-5
Facility Location: DOWNSTREAM	Quad: FLAT GAP	Northing: 3559465.2884	Easting: 10255749.8253
Stream: POWELL RIVER			

MPID Number: 0004000	Action:	Sampling Freq/Qtr: 3	Location Number: BR-4
Facility Location: DOWNSTREAM	Quad: NORTON	Northing: 3545356.1463	Easting: 10249359.812
Stream: ROARING FORK			

MPID Number: 0003999	Action:	Sampling Freq/Qtr: 3	Location Number: BR-3
Facility Location: UPSTREAM	Quad: FLAT GAP	Northing: 3556379.1416	Easting: 10248266.621
Stream: ROARING FORK			

MPID Number: 0003997	Action:	Sampling Freq/Qtr: 3	Location Number: BR-1
Facility Location: UPSTREAM	Quad: FLAT GAP	Northing: 3562964.2517	Easting: 10250787.5939
Stream: POUND FORK			

13. Ground Water Monitoring:

Ground water monitoring requirements and locations are addressed in Sections 5.3, 5.6, and 21.2 of the joint CSMO/NPDES permit.

14. Climatological Monitoring Description:

Climatological monitoring requirements and location information are addressed in Sections 5.12 and 21.2 of the joint CSMO/NPDES permit.

15. Threatened/Endangered Species

For additional information regarding Threatened/Endangered Species, refer to Section 8.7 of the joint CSMO/NPDES permit application.

16. Site Inspection:

Site inspections are required under the Surface Mining Control and Reclamation Act (SMCRA) permit under 4 VAC 25-130-840.11.

17. Storm Water Discharges Associated with Industrial Activity:

All outfalls from the facility which contain storm water runoff will be subject to the storm water provisions of the NPDES program as governed by 9 VAC 25-31 et seq. The Surface Mining Control and Reclamation Act (SMCRA) permit authorized under 4 VAC 25-130 and issued jointly with this NPDES permit contains extensive storm water monitoring and management requirements which are incorporated into this NPDES permit by reference.

The management and control of all storm water discharges not covered under 9 VAC 25-31 et seq is governed by the storm water management and drainage control provisions proposed in the SMCRA permit and meet or exceed the Storm Water Pollution Prevention Plan requirements of 9 VAC 25-151-80.

18. Anti-Degradation Review:

Stream Tier Designation(s):

There are 5 streams designated as affected surface waters for this permit. Canepatch Creek has a designation of Tier I. This stream is either entirely or partially within the Powell River TMDL Watershed. This watershed has identified stressor(s) of TSS. Pound Fork has a designation of Tier I. This stream is either entirely or partially within the Powell River TMDL Watershed. This watershed has identified stressor(s) of TSS. Roaring Fork has a designation of Tier I. This stream is either entirely or partially within the Powell River TMDL Watershed. This watershed has identified stressor(s) of TSS. Buckeye Branch has a designation of Tier I. This stream is either entirely or partially within the Powell River TMDL Watershed. This watershed has identified stressor(s) of TSS. Powell River has a designation of Tier I. This stream is either entirely or partially within the Powell River TMDL Watershed. This watershed has identified stressor(s) of TSS.

The State Water Control Board's Water Quality Standards includes an antidegradation policy (9 VAC 25-260-30). All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

19. Anti-Backsliding:

Because the effluent limitations included in the draft permit are at least as restrictive as those in the existing permit, the proposed action conforms to the anti-backsliding provision of the regulations.

20. Permit Conditions:

Refer to the standard conditions and special conditions contained in the joint CSMO/NPDES permit.

The following special conditions are proposed to be included in Sections C and D of the NPDES permit:

- a. **Industrial Reopener.** The permit includes a standard reopener to address potential changes in the permit which may be required as a result of changes in effluent standards or limitations promulgated or approved under Section 307(a)(2) of the Clean Water Act. (Part B.I) [Section C]

Rationale: 40 CFR 122.44 requires all permits for primary industrial categories to include the requirements of Section 307(a)(2) of the Clean Water Act.

- b. **Notification Levels:** The permit includes a special condition which requires the permittee to notify the Department if they discharge certain toxic pollutants above established concentrations. [Section C]

Rationale: Required by VPDES Permit Regulation, 25-31-200 A for all manufacturing, commercial, mining, and silvicultural dischargers.

- c. **TMDL Reopener.** The permit includes a standard reopener to address potential changes in the permit which may be required as a result of a new or revised TMDL. [Section D]

Rationale: Section 303(d) of the Clean Water Act requires that Total Maximum Daily Loads (TMDLs) be developed for streams listed as impaired. This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL approved for the receiving stream. The reopener recognizes that, according to Section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL basin plan, or other waste load allocation prepared under section 303 of the Act.

It is believed that the joint CSMD/NPDES permit effluent limitations and special conditions will maintain State water quality standards.

21. **Materials Storage:**

See Special Condition (p) 2 of the standard NPDES Permit Conditions in the NPDES Permit, Section C.

22. **NPDES Permit Rating Worksheet:**

The staff has completed the NPDES Permit Rating Worksheet and has determined that the facility meets the criteria to be classified as a Minor Source. The completed worksheet is included in Appendix V.

Total Score: 50

23. **Detailed Description - Location of Discharge Point(s)**

Reference the mapping included in Section 21.2 of the permit application.

24. Public Participation:

Public Notice Information:

Public Notice required.

A copy of the application materials is made available for public inspection and comment at the designated public office. A copy of the draft NPDES permit and fact sheet are available for public inspection and comment at the Division's Big Stone Gap office.

☒ NPDES Permit Renewal/Modification

Public notice requires publication for 1 week in a newspaper of general circulation. The public comment period runs 30 days following the date of publication. Refer to Sections 2.6 and 2.7 of the joint CSMO/NPDES permit.

☐ New Joint Permit, CSMO/NPDES Permit Renewal, or Significant Revision

Public notice requires publication for 4 consecutive weeks in a newspaper of general circulation. The public comment period runs 30 days following the date of last publication. Refer to Sections 2.6 and 2.7 of the joint CSMO/NPDES permit.

Public Comment Beginning Date:

08/20/2010 (1st publication, COALFIELD PROGRESS (Norton))

Public Comment Ending Date:

09/19/2010 (30 days following last publication, COALFIELD PROGRESS (Norton))

Public Comment Information:

Any person whose interests are or may be adversely affected by the proposed operation, or an Officer, or Head of any Federal, State, or local government agency or authority may within 30 days of the date of fourth publication may submit written comments or objections to the Division of Mined Land Reclamation concerning the proposed operation (and may also request, in writing, that the Division hold an Informal Conference concerning the application).

Any relevant comments received during the public comment period or provided during an Informal Conference are addressed in writing and provided to those who comment. Comments that were received after the public comment period were considered during the technical review process.

Procedures for requesting an informal conference:

A request for an informal conference shall follow the requirements of 4 VAC 25-130-773.13(c) of the Virginia Coal Surface Mining Reclamation Regulations.

All correspondence concerning the application should be submitted to the Division of Mined Land Reclamation, P.O. Drawer 900, Big Stone Gap, Virginia 24219, Telephone: (276)

523-8202 Attn: Permit Section. Written comments and a request for informal conference may be e-mailed to the Division at dmlrpublicnotice@dmme.virginia.gov

Procedures for requesting a formal hearing:

4VAC25-130-775.11(g)

Administrative review:

Within 30 days after an applicant or permittee is notified of the decision of the division concerning an application for approval of exploration required under Part C2, a permit for surface coal mining and reclamation operations, a permit revision, a permit renewal, or a transfer, assignment, or sale of permit rights, the applicant, permittee, or any person with an interest which is or may be adversely affected by the decision may request, in writing, a formal public hearing to contest such action with the Director of the Division of Mined Land Reclamation, Drawer 900, Big Stone Gap, VA 24219.

Procedures for judicial review:

4VAC25-130-775.13:

Judicial review

(a) General. Any applicant, or any person with an interest which is or may be adversely affected by the final administrative decision and who has participated in the administrative hearings as an objector may appeal as provided in subsection (b) of this section if—

(1) The applicant or person is aggrieved by the director or his designee's final order under 4VAC25-130-775.11; or

(2) Either the division or the director failed to act within time limits specified in 4VAC25-130-775.11.

(b) Judicial review. The final order of the division pursuant to subsection (a) of 4VAC25-130-775.11 shall be subject to judicial review as provided by the Virginia Administrative Process Act and the rules of the Supreme Court of Virginia as promulgated thereto. The availability of such review shall not be construed to limit the operation of the rights established in Section 520 of the Federal Act.

(c) All notices of appeal for judicial review of a hearing officer's final decision, or the final decision on review and reconsideration, shall be filed with the Director, Division of Mined Land Reclamation, Department of Mines, Minerals and Energy, Post Office Drawer 900, Big Stone Gap, Virginia 24219.

25. Variances

This permit has applicable waiver variances. The permit standards with waivers and variances are as follows:

Contemporaneous reclamation (4 VAC 25-130-780.18(d)(3) & 4 VAC 25-130-816)

Within 500 feet of known abandoned underground mine works (4 VAC 25-130-816)

Within 500 feet of active underground mine works (4 VAC 25-130-816.79)

Within 100 feet of a perennial or intermittent stream (4 VAC 25-130-816.57)

26. Staff Comments

Staff comments and applicant responses are located in Section 21.3 of the joint CSMO/NPDES permit.

27. Impaired Segments/TMDL watersheds

There are 2 TMDL areas which contain a waste load allocation for active coal mining facilities affected by the outfalls of this permit - Powell River, South Fork Pound River.

The outfall(s) 027,029,031A,032,009,010,011,012,002,001A-

T,019,020,025,030A,031,028,001A,001B,021B,022,023,026 are previously approved for this permit for discharge to the Powell River Watershed.

There are no proposed discharges to the Powell River Watershed for this application.

Offset Summary:

There is no offset required for this permit.

Future Growth

The Department will track the future growth balance given in the TMDL for this watershed utilizing the Department TMDL Reporting System. The future growth allocation will be managed in a manner similar to an offset where new applications will draw from future growth if mining waste load is not available for the watershed. If the future growth is utilized as well as the mining waste load for the watershed, the permit will be required to have a mining waste load offset in order to discharge.

PCBs

The permit is not expected to have a direct effect within the Levisa River watershed; therefore, PCB monitoring is not mandated for the permit.

List of Appendices and Attachments

1. Appendix I: Representative Sampling/Effluent Screening
2. Appendix II: Evaluation of Effluent Limitations
3. Appendix III: Reasonable Potential Analysis
4. Appendix IV: Evaluation of Alternate Effluent Limitations- Remining
5. Appendix V: NPDES Major/Minor Permit Rating Worksheet
6. Attachment A – Factsheet/Monitoring History

DRAFT PUBLISHED 2014-04-29 EXPIRES 2014-05-29

Appendix I. Representative Sampling/Effluent Screening:

Representative Sampling

Typical surface mine discharges can be divided into three categories based on the area controlled and whether the outfall is expected to discharge continuously, intermittently, or rarely/never.

Discharges within each of the three categories are located in the same geological strata and receive precipitation runoff from the same sources. Due to the similarities between discharges within each classification, DMME is allowing representative sampling from one outfall of each class with the exception of outfalls expected to rarely/never discharge, which require no representative sampling. Initial permit conditions will be imposed based on the representative data. Permit limits will be modified as appropriate at renewal once discharge data is collected from the outfall when constructed. If any outfalls begin to have frequent discharges then representative sampling will be required and any necessary permit limits will be developed. If the representative outfall is not constructed first or is not the first outfall of the type represented to discharge, the first discharging outfall should be utilized.

Class I, Basins Controlling Drainage from Disturbed Area and Fills. The representative outfall for Class I is outfall 012. The other outfalls in Class I are outfalls 001A-T, 020, 023, 026, and 032.

Class II, Basins Controlling Drainage from Disturbed Area. The representative outfall for Class II is outfall 010. The other outfalls in Class II are outfalls 001A, 001B, 002, 009, 011, 019, 021B, 022, 025, 027, 028, 029, 030A, 031, and 031A.

Effluent Screening

WET Assays – Effluent

WET assays are utilized as a screening tool to determine if a reasonable potential for effluent toxicity exists. Acute and/or chronic bioassays as appropriate will be utilized to measure whole effluent toxicity in discharge samples for four consecutive quarters. Effluents demonstrating toxicity will receive appropriate WET limits for the discharge. Discharges not exhibiting toxicity will not receive WET limits and will only be required to submit additional WET tests at renewal and/or mid-term. Characterization will be conducted by a qualified laboratory per DEQ protocol. WET assays will utilize standard WET testing organisms and toxicity will be determined utilizing the results from such testing.

For Class I outfalls, chemical characterization and acute and chronic WET analyses will be required because this class of outfalls is expected to have elevated TDS and intermittent to continuous discharges.

For Class II outfalls, chemical characterization and acute and chronic WET analyses will be required because this class of outfalls is expected to have elevated TDS and intermittent to continuous discharges.

Chemical Analyses – Effluent

The permit requires sampling for the parameters in Table 1 within 6 months of commencing the permitted activity and at renewal for each representative outfall, and in receiving streams. If any outfalls begin to have frequent discharges then representative sampling will be required and any necessary permit limits will be developed. If the representative outfall is not constructed first or is not the first outfall of the type represented to discharge, the first discharging outfall should be utilized. This chemical effluent screening

data will be utilized for the RP and appropriate numerical limits will be applied if necessary. These parameters will be compared to instream baseline data and numerical water quality standards to determine whether numerical limits and/or mixing zones are required. The chemical analyses for effluent screening are in addition to the currently required bi-weekly sampling required for NPDES monitoring compliance purposes.

For this permit, outfall(s) 010, 012 is(are) designated as the representative outfall(s) for effluent screening.

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TABLE 1 - Parameters

Parameter

Flow (gpm)
Temperature (°C)
pH (std units)
TSS (mg/L)
Specific Conductance (uS/cm)
TDS (mg/L)
Sulfates (mg/L)
Bromide (mg/L)
Chlorides (mg/L)
Aluminum (mg/L)
Iron (mg/L)
Manganese (mg/L)
Magnesium (mg/L)
Total Acidity (mg/L)
Total Alkalinity (mg/L CaCO₃)
Bicarbonate Alkalinity (mg/L)
Carbonate Alkalinity (mg/L)
Hardness (mg/L CaCO₃)
Total Zinc (µg/L)
Total Antimony (µg/L)
Total Arsenic (µg/L)
Total Beryllium (µg/L)
Total Cadmium (µg/L)
Total Chromium (µg/L)
Total Copper (µg/L)
Total Lead (µg/L)
Total Mercury (µg/L)
Total Nickel (µg/L)
Total Selenium (µg/L)
Total Silver (µg/L)
Total Thallium (µg/L)
Total Barium (µg/L)
Total Boron (µg/L)
Total Cobalt (µg/L)
Total Cyanide (µg/L)
Total Phenols (µg/L)
Nitrate (mg/L)
Nitrite (mg/L)
Dissolved Organic Carbon (mg/L)
Hydrogen Sulfide (mg/L)²

² This parameter need only be analyzed for underground mine discharges.

Appendix II: Evaluation of Effluent Limitations

Sediment control structures and the associated NPDES outfalls for surface coal mining operations primarily receive precipitation runoff from mined areas and discharge in response to precipitation events. Technology-based effluent limitations per 40 CFR 434 apply.

The permittee is required to monitor for selenium and meet selenium limits for outfalls 010 and 012, as a result of detection of selenium in both the discharges from 010 and 012; and the receiving stream. This requirement is documented in Part II, Section B, Schedule of compliance.

The AEL (Alternate Effluent Limit) is the minimum rainfall event necessary for alternate effluent limitations to apply to the specified parameter for the given outfall. TSS is to be collected and reported at all times, even when the AEL is utilized.

Alternate effluent limits are available.

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Appendix III: Reasonable Potential Analysis

DMLR must perform a Reasonable Potential Analysis (RPA) (9VAC 25-31-220 D.1) for each proposed discharge in determining which permit conditions are needed for a new or expanded discharge permit. This analysis is based primarily on the potential for the permit's sediment control structures to discharge and upon the nature of the discharge, whether or not dilution is available in the receiving streams, mining practices, including the geology, drainage area, etc. DMLR may utilize applicable WET screening data, effluent chemical monitoring data, instream chemical data, and instream biological survey data in conducting the RPA. As part of any RPA, DMLR will consider whether or not there are representative discharges that can be used to determine the RP for a given outfall. In TMDL watersheds, DMLR will consider whether discharges will comply with the TMDL as a portion of the RPA.

In summary, Virginia's approach will include these measures as applicable to address the potential impact of mining discharges and to address Virginia's Narrative Water Quality Standards.

1. The potential for discharge, including both flow rate and duration
2. Chemical characterization of discharges and receiving streams
3. Instream biologic characterization including benthic surveys, fish surveys, chemical water quality analyses, and habitat surveys to address effects on sensitive species
4. WET assays to determine effluent toxicity when deemed necessary by DMLR

Reasonable Potential Analysis for TDS to Determine Requirement for WET Testing

DMLR utilizes the following analysis to determine if a discharge has a reasonable potential to contravene the applicable narrative water quality standards with respect to TDS and thus require WET testing. This analysis includes the potential for a sediment control structure to discharge and whether dilution is available in the receiving stream. It utilizes the harmonic mean of stream flow, allows areal adjustment of that flow for reference locations based on areal differences and assumes complete mixing. The instream mixing results are compared to endpoint values derived in the applicable TMDL or to an applicable screening value if it is in either a non-TMDL receiving stream or TMDL receiving stream where TDS is not identified as a stressor.

Harmonic Mean Calculation Adjusted for Zero Values

This calculation adjusts the harmonic mean for zero flow values for mixing calculations

$$H = (N_T - N_0) / N_T \times H_{\text{non zero}}$$

Where:

N_T = Total number of flow measurements (zero and non-zero)

N_0 = Number of zero flow measurements

$H_{\text{non zero}}$ = Harmonic mean of non zero flow measurements

H = Harmonic mean

Outfall 010

$N_T = 30.0$

$N_0 = 0.0$

$H_{\text{non zero}} = 3917.9 \text{ gpm}$

$H = 3917.9 \text{ gpm}$

Outfall 012

$$N_T = 14.0$$

$$N_0 = 0.0$$

$$H_{\text{non zero}} = 5582.2 \text{ gpm}$$

$$H = 5582.2 \text{ gpm}$$

Mixing Zone Calculation

This calculation assumes a complete mix of stream flow and effluent

$$(C_s Q_s + C_e Q_e) / (Q_s + Q_e) = C_r$$

Where:

C_s = Average concentration of constituent in stream (background)

Q_s = Harmonic mean of receiving stream flow for precipitation driven discharges or critical volumetric flow of stream for other discharge types (prior to mixing)

C_e = Average concentration of constituent in effluent discharge (average)

Q_e = Maximum volumetric flow of effluent discharge (excluding outliers)

C_r = Resulting instream concentration of constituent at critical stream flow (after mixing)

Outfall 010

$$C_s = 994.0 \text{ mg/L}$$

$$Q_s = 3918.0 \text{ gpm}$$

$$C_e = 1003.0 \text{ mg/L}$$

$$Q_e = 100.0 \text{ gpm}$$

$$C_r = 994.2 \text{ mg/L}$$

Outfall 012

$$C_s = 994.0 \text{ mg/L}$$

$$Q_s = 5582.0 \text{ gpm}$$

$$C_e = 1395.0 \text{ mg/L}$$

$$Q_e = 450.0 \text{ gpm}$$

$$C_r = 1023.9 \text{ mg/L}$$

The resulting instream concentration of TDS at critical stream flow for both outfall 010 and outfall 012 exceed the 422 mg/L watershed limit and therefore will require WET testing.

Reasonable Potential for Selenium discharge

Selenium effluent limits are being required on outfalls 010 and 012 due to previous excursions above the Virginia water quality standard chronic value. Effluent samples collected in the Fall 2010 (09/20/2010) and Spring 2011 (02/21/2011) at outfall 010 had selenium concentrations of 18.3 µg/L and 19.1 µg/L respectively; outfall 012 had selenium concentrations of 11.1 µg/L and 10.7 µg/L respectively. In-stream sampling at location BCPT1 had a selenium concentration of 5.00 µg/L, indicating that the discharges have a reasonable potential to contravene the numeric water quality standard for selenium and that selenium limits are appropriate.

Instream Biological Surveys

Biological Monitoring Plan ☒ Yes ☐ No

To ensure protection of aquatic species, biological surveys are to be completed to determine the health of the receiving stream as outlined in the joint CSMO/NPDES permit. Semi-annual biological monitoring at Biological Aquatic Stations BCPT-1, BPR-1, BRFK-1, BRFK-2, BRFK-3, BRFK-4, C-P12, C-P10 is required (See Part I Section 8.3 and the applicable map in Part I Section 6.2 in the DMLR Electronic Permit Application for location information). The Virginia Stream Condition Index (VASCI) protocol will be used. Also, stream habitat scores and chemical data will be collected at these locations. All biologic sampling shall be done in accordance with the Virginia Department of Game and Inland Fisheries scientific collection permit requirements.

SSPM Applicable to this Permit ☐ Yes ☒ No

DMLR Aquatic Species Specific Protection Measures (SSPM) guidelines should be followed when the proposed discharge is within 5 miles of Threatened and Endangered Species or their critical habitat.

If the aquatic ecosystem at the assessment stations, prior to initiation of the permitted activity, is not impaired based on the VASCI score, then the acceptable future biological condition will be a VASCI score greater than or equal to 68. In determining whether a lower VASCI score represents an unacceptable condition, the DMLR will utilize best professional judgment, including a holistic examination of the health of the aquatic ecosystem.

If the aquatic ecosystem at the assessment stations, prior to initiation of the permitted activity, is impaired based on the VASCI score, then the applicant will need to identify existing conditions within the watershed that may be contributing to the problem. A VASCI score greater than or equal to the baseline value would represent an acceptable future condition.

Appendix IV: Evaluation of Alternate Effluent Limitations: Remining

None requested.

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Appendix V: NPDES Permit Rating Worksheet

Date: 30 April 2014

DMLR Application No: 1006884

DMLR Permit No: 1101760

VPDES Permit No: 0081760

FACTOR 1 Toxic Pollutant Potential

Does this permit have a prep plant?	Yes	Toxicity Group	Points
	No	6	30
		5	25

Factor 1 Score: 25

FACTOR 2 Flow/Stream Flow Volumes

Coal industry discharges are always Type III

Sum of average discharges for each outfall for permit: 0.64226597 MGD

Flow Class	Code	Points
< 1 MGD	31	0
< 5 MGD	32	10
< 10 MGD	33	20
> 10 MGD	34	30

Factor 2 Score: 0

FACTOR 3 Conventional Pollutants

TMDL load for all outfalls on permit:

Flow (gpm): 446.018035537
 Concentration (mg/L): 35.0
 Days: 1.0
 Load (lbs/day): 187.599645927

Load Class	Code	Points
< 100 lbs/day	1	0
< 1000 lbs/day	2	5
< 5000 lbs/day	3	15
> 5000 lbs/day	4	20

Factor 3 Score: 5

FACTOR 4 Public Health Impact

Is a public drinking water intake located within 50 miles downstream of discharge?

Answer	Points
No	0
Yes	See below

If yes, is facility an UNDERGROUND prep plant?

Answer	Code	Points
No	5	5
Yes	10	10

Factor 4 Score: 5

FACTOR 5 Water Quality Factors

- A) Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-based federal effluent guidelines, or technology-based state effluent guidelines), or has a waste load allocation been assigned to the discharge?

Answer	Code	Points
Yes		10
No	2	0

Factor 5a Score: 10

- B) Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

Answer	Code	Points
Yes	1	0
No	2	5

Factor 5b Score: 5

- C) Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

Answer	Code	Points
Yes	1	10
No	2	0

Factor 5c Score: 0

FACTOR 6 Proximity to Near Coastal Waters

Is the permit within 50 miles of near coastal waters?

Answer	Points
Yes	5
No	0

Factor 6 Score: 0

Worksheet Total Score: 50

D) Attachment A. Factsheet/Monitoring History

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